SNS COLLEGE OF ALLIED HEALTH SCIENCES- COIMBATORE 35

DEPARTMENT : RADIOGRAPHY AND IMAGNG TECHNOLOGY

SUBJECT : GENERAL PHYSICS, RADIATION PHYSICS AND PHYSICS OF DIAGNOSTIC RADIOLOGY

PAPER : PAPER II

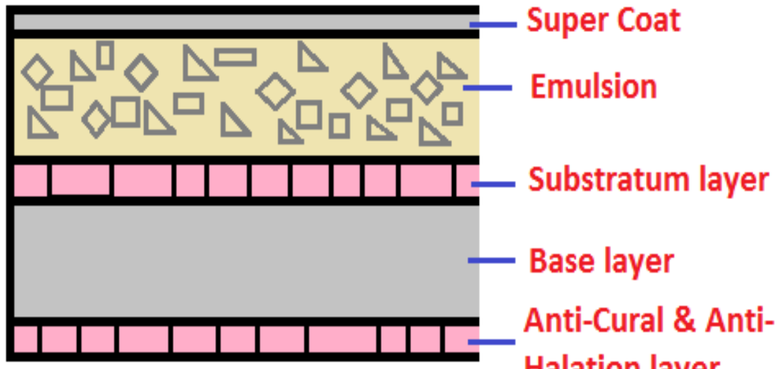
TOPIC : 2. SINGLE AND DOUBLE COATED X-ray FILM

SINGLE COATED X-ray FILM

ACCORDING TO THE EMULSION LAYER

SINGLE COATED X-RAY FILM :

- The Photosensitive emulsion is coated only on one side of the film base is called single coated and or single side coated film.
- These films are used with a single intensifying screen.

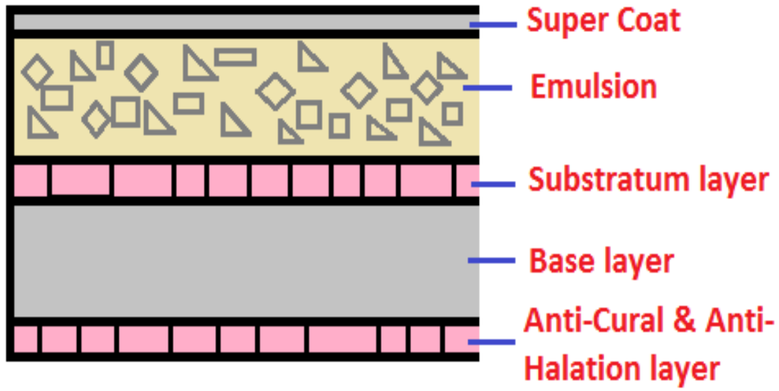


Single Coated Film

SINGLE COATED X-ray FILM

EXAMPLES OF SINGLE COATED X-RAY FILM

- **DUPLICATING FILM :** It is a single side emulsion film. It is used for duplicating the radiograph.
- **MAMMOGRAPHY FILM :** It is a single emulsion film and used with a single intensifying screen.
- **PHOTOFLUROGRAPHY FILM :** It is a single side emulsion film. It is used in an odelca camera for mass miniature radiography.
- **RADIATION MONITORING FILM :** It is a single side emulsion film. It is used in personal radiation monitoring dosimeter.
- **INDIRECT RECORDING FILM :** It is a single side emulsion film. It is used in USG cameras, CT scan cameras etc.

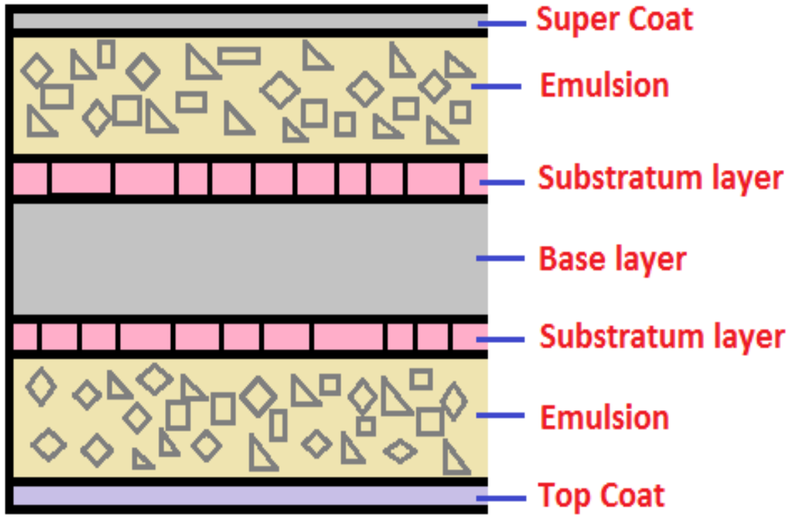


Single Coated Film

DOUBLE COATED X-ray FILM

DOUBLE COATED X-RAY FILM

- The photosensitive emulsion is coated on both sides of a transparent base is called double coated or double side coated film.
- The double- sided coated is more sensitive than single coated X-ray film.
- The film is sandwiched between a pair of intensifying screens in the cassette.
- During the exposure, each side of the emulsion is exposed and resulting in two images that are superimposed upon each other but counted as one image.
- The double side coated X-ray film is widely used in the radiology department.



Double Coated Film

INTERROGATIONS

1. What is single coated X-ray film ?
2. What is double coated X-ray film ?
3. Examples of single coated X-ray film
4. Difference between single and double coated X-ray film

REFERENCES

1. Radiographic latent image processing – W. E. J McKinney

2.Diagnostic Radiography – A concise practical Manual – Glenda J. Bryan (4th edn),

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THANK YOU